



9463

**Administration Report**

**of**

**The Public Works Department**

**H.E.H. the Nizam's Government**

**for the year**

**1351 F.**

**Hyderabad-Deccan  
Government Central Press  
1944**



**H.E.H. the Nizam's Public Works Department  
Administration Report for the  
Year 1351 Fasli.**

**CHAPTER I.**

**A.—DIRECTION.**

Mr. Mohammed Ahmed Mirza, C.E. (King's College, London), continued as Chief Engineer and Secretary to Government, P.W.D., (Buildings, Roads, etc.) and Mr. Syed Arifuddin, B.Sc. Hons. (Manchester), M.I.E., (India), as Chief Engineer and Secretary to Government, P.W.D. (Irrigation, Drainage, etc.), throughout the year. Mr. Syed Ali Raza, who has reverted from the post of Chief Engineer, N. S. Rly. to the P.W.D., was appointed Chief Engineer and Secretary to Government, Headquarters, Hydro-electric projects, etc., with effect from Isfandar 11/1351 Fasli.

Mr. Mohd. Hamiduddin Mahmood was Personal Assistant to the Hon'ble Member, P.W.D., and officiating Deputy Secretary to Government, P.W.D., throughout the year.

Mr. Mohd. Ashraf, B.Sc. (Durham), A.M.I.E. (India), continued as Assistant Chief Engineer (Buildings, Roads and Headquarters), and Mr. Mir Jaffer Ali, B.E., as Assistant Chief Engineer (Irrigation) throughout the year.

Mr. Abu Turab, retired Superintending Engineer, remained on duty throughout the year as Special Officer for the preparation of the P.W.D. Procedure Code.

**B.—SUPERINTENDENCE.**

**PERMANENT CIRCLES. /**

*Medak Circle.*—Mr. Mir Ahmed Ali Khan, B.Sc. Hons. (Manchester), M.I.E. (India), was Superintending Engineer of this Circle for the whole year,

*Aurangabad Circle.*—Mr. G. M. Khan, M.A., B.Sc. (Edin.), A.M.I.C.E. (London), continued as Superintending Engineer for the Circle for the whole year.

*Warangal Circle.*—Mr. M. Gopalan, B.E. (Madras), M.I.E. (India), Special Superintending Engineer, Capital Works Circle, continued to hold charge of the Circle throughout the year in addition to his own duties.

#### TEMPORARY CIRCLES.

*Osmania University Buildings Project Circle.*—Mr. M. Anwarullah, B.Sc. (Durham), Superintending Engineer, was in charge of the Circle throughout the year, except for brief periods now and then, totalling 2 months, when he was on leave.

*Capital Works Circle.*—Mr. M. Gopalan, B.E. (Madras), Special Superintending Engineer, held charge of the Circle during the year.

#### C.—GENERAL.

Nawab Ali Nawaz Jung Bahadur, F.C.H., was Consulting Engineer to Government throughout the year.

The Ibrahim Bagh Military Works Independent Sub-Division was under the direct control of the Chief Engineer and Secretary to Government, P.W.D. (Roads and Buildings), till 21-10-1951 F., when it was placed under the control of the Superintending Engineer, Osmania University Buildings Project Circle.

### CHAPTER II.

#### CHIEF ARCHITECT'S OFFICE.

Nawab Zain Yar Jung Bahadur continued as Chief Architect throughout the year and held administrative charge of the Palace Division in addition.

Mr. Eric Marret worked as Deputy Chief Architect and Mr. Hashmat Raza as Assistant Architect during the year under review.

Messrs. N. D. Narielwalla and M. B. Dave were promoted as Assistant Architects under the Reorganisation Scheme sanctioned by the Executive Council on 16-8-1951 Fasli,

The necessary plans for the undermentioned works were drawn up during the year.

#### SCIENCE COLLEGES (OSMANIA UNIVERSITY).

1. (a) *The Physics College*.—The structural part was completed and 29 drawings, showing details of ornamentation, etc., were made and supplied.

(b) *The Biology College*.—A part of the roof of the second floor was constructed and 21 drawings, indicating necessary details, were supplied.

(c) *The Chemistry College*.—Work on the first floor is proceeding and 24 drawings, showing necessary details, were supplied.

(d) *The Technical College*.—The structure has come to the first floor level. 31 drawings showing necessary details were supplied.

#### THE T. B. SANATORIUM NEAR VICARABAD.

2. The construction of the T.B. Sanatorium on the Ananthagiri Hills, near Vicarabad, was started during 1350 F. and an expenditure of Rs. 3,87,270 was incurred up to the end of the year under review, against the estimated cost of about Rs. 13 lacs.

Site clearing and road making and avenue plantation are in progress. Building work has been stopped due to the war situation. 35 drawings of 1/8 inch scale working plans were supplied.

#### THE CENTRAL SECRETARIAT BUILDINGS.

3. This building is estimated to cost Rs. 95,75,000. Its foundation-stone was laid by H.E.H. the Nizam on 17-11-1350 F. Construction work has not yet been commenced. 1/16 inch plans of the basement, the ground and the 1st floors were submitted for approval.

#### THE IBRAHIM BAGH MILITARY BARRACKS.

4. The above barracks at an estimated cost of Rs. 15,12,400 have been completed, except 3 Captains quarters.

In addition, the necessary plans for the construction of the undermentioned buildings, which were either under construction or proposed to be taken up soon, were supplied.

	Estimated cost Rs.
1. The Riverside Women's Hospital ..	25,77,000
2. Additions and alterations to the Victoria Zenana Hospital : ..	1,60,000
3. Additions and alterations to the Court of Wards office building ..	1,44,000
4. The family Hospital at the Central Military Hospital, the First Lancers Lines .. .. .	1,00,000
5. The Picture gallery and the office of the Director, Archæology Department, in the Public Gardens, Hyderabad .. .. .	3,12,013
6. The Training Battalion Lines ..	3,50,000
7. The Osmania Club in the Public Gardens .. .. .	75,000
8. The Broadcasting Station near Fateh Maidan .. .. .	2,70,000

#### A.R.P. WORKS.

5. Various drawings showing half size and full size constructional details, etc., of the undermentioned shelters were supplied.

1. The Air-Raid Shelters at King Kothi Palace.
2. do Bella Vista.
3. do Hill Fort.
4. do Sahebzada Nawab Basa-  
lat Jah Bahadur.

5. The Security Chamber at King Kothi Palace.

The total number of blue prints supplied to the various construction works during the year was approximately 2,000,

## CHAPTER III.

### INVESTIGATIONS.

The normal survey operations of the department were carried out, as usual, by the T.R.S. Parties, attached to the Circles. Investigations of Irrigation Projects were undertaken by the Hydro-Electric Survey party working under the direct control of the Chief Engineer and Secretary to Government, P.W.D., Irrigation Branch, by the Combined Survey Division attached to the Capital Works Circle and by the Special Survey Parties attached to the Divisions.

#### I.—INVESTIGATIONS BY T.R.S. PARTIES.

*Warangal Circle.*—The Survey party of this Circle surveyed and submitted estimates for 181 tanks during the year, amounting to Rs. 7.82 lakhs.

In addition to the above, the T.R.S. Party surveyed during the year under report 132 tank works costing roughly Rs. 5.43 lakhs. The estimate for the works have not been submitted yet. An area of 400 sq. miles was also investigated during the year for surveys of Irrigation works. Surveys of Asifabad-Kothapet Road (length 14 miles) estimated to cost Rs. 2 lakhs and of special repairs to Thallada-Singabhoopalem Road estimated to cost Rs. 44,600 were also completed.

*Aurangabad Circle.*—The Survey Party attached to this Circle executed the survey of roads of an aggregate length of 313 miles spread over Nanded, Bidar, Bhir, Parbhani and Osmanabad Divisions. The estimates for the surveyed roads are under preparation. Besides this 22 tanks in the Nizamabad Division were also surveyed but the preparation of the estimates of the cost was held over due to survey work of Aerodromes.

*Medak Circle.*—The T.R.S. Party attached to this Circle carried out the following important survey works:—

1. Gauging of the proposed submersible bridge on the Shorapur-Lingsugur Road at Tintini-Raichur Division.



2. Installation of gauges for the observation of water level in the Bhima river at Ferozabad (Gulbarga Division).
3. The Malla-Khambavi Road (Gulbarga Division).
4. The Hundgi-Kodekal Road, (Gulbarga Division).
5. The Sedam-Gulbarga Road, (Gulbarga Division).

## II.—SPECIAL SURVEY PARTIES ATTACHED TO DIVISIONS.

The above parties of the Warangal Circle continued the investigation and survey of the following important major works.

1. *Halia Project*.—Costing Rs. 23.00 lakhs. This is proposed to irrigate 10,780 acres of Abi and 4,350 acres of Tabi. It is expected that 11 villages will be served by the reservoir.

2. *Kothapett Reservoir*.—A site has been selected for a reservoir, a mile from the Paper Factory, for irrigation purposes. The approximate cost of the scheme will be Rs. 50,000.

3. *Akair Reservoir Project*.—This project is expected to irrigate 8,350 acres of Abi and 4,310 acres of Tabi.

## III.—SPECIAL INVESTIGATIONS.

The Combined Survey Division attended to its usual work relating to the projects under investigation till 1-5-51 F., when it was absorbed in the Division sanctioned for the surveys of the Tungabhadra Project Joint Scheme.

The following are the works carried out by the Tungabhadra Project Division.

1. Preparation of plans and estimates of the Tungabhadra Reservoir.
2. Drafting of the report on Hydro-Electric scheme of the Dominions.
3. Preparation of estimates for compensation for submerged area under the Tungabhadra Reservoir.
4. Completion of estimate for compensation for houses in the submerged areas.
5. Drilling bore holes Calyx Drills along the line of Tungabhadra Dam out of the original estimate of Rs. 30,567.

The Calyx Drill operations for ascertaining the nature of rock in foundation along the line of the Tunga-bhadra Dam was done by Engineers of the Madras Government and results were made available as the work was progressing. Out of the allotment of Rs. 15,284 being 50 per cent. of the total cost debitable to this Government, an expenditure of Rs. 15,217 was booked. As the drilling operations could not be completed within the original estimate a comparative statement amounting to Rs. 17,366 was submitted.

## CHAPTER IV.

### BUILDINGS AND COMMUNICATIONS.

The total expenditure incurred during the year under review on Buildings and Communications was Rs. 93,79,931 as detailed below:—

	Rs.
1. Establishment .. ..	19,32,888
2. Works.	

Rs.

#### (a) *Buildings.*

Original works ..	18,83,120	
Periodical repairs ..	8,54,215	
Special repairs ..	1,16,455	28,53,789

#### (b) *Communications.*

Pre. Surveys ..	14,801	
Original works (excluding relief works) ..	18,26,844	
Special repairs ..	85,990	
Periodical repairs ..	23,88,708	43,16,856

3. Tools and Plant .. ..	1,50,075
4. Suspense .. ..	1,15,430
5. Rent, rates and taxes .. ..	10,893

Total .. 93,79,931

Road fund works .. 2,91,767

The outlay on capital Buildings was Rs. 19,74,094 as noted below:—

			Rs.
1. Residential Buildings	..	..	31,326
2. University Buildings	..	..	8,32,002
3. District Police Buildings	..	..	68,870
4. Military Buildings	..	..	6,26,679
5. Central Secretariat Buildings	..	..	4,15,217
Total ..			<u>19,74,094</u>

### BUILDINGS (MET FROM REVENUE).

A brief review of works of the value of Rs. 25,000 and above is given below:—

*Revenue Buildings.*—The following works were in progress during the year:—

1. The Tahsil office at Sultanabad, Karimnagar Division. Estimate Rs. 38,224. Work has been completed but not finalled for want of sanction to revised estimate. Outlay to the end of the year was Rs. 37,862.
2. The Tahsil office at Laxettipet, Asifabad Division. Estimate Rs. 39,000. Outlay to end of the year was Rs. 38,995. Work has been completed.
3. The Tahsil office at Jintur, Parbhani Division. Revised estimate Rs. 48,240. Outlay to end of the year was Rs. 43,696. Work has been completed but not finalled.
4. The Tahsil office at Banswada, Nizamabad Division. Estimate Rs. 37,700. Outlay to end of the year was Rs. 37,362.

*Judicial Buildings.*—

1. The Munsiff's Court at Khandar, Nanded Division. Estimate Rs. 49,040. Outlay to end of the year was Rs. 43,768. Work has been completed but not finalled for want of sanction to the revised estimate.
2. The Munsiff's Court at Kustagi, Raichur Division. Estimate Rs. 48,900. Outlay to end of the year was Rs. 36,970

3. The Munsiff's Court at Chincholi, Gulbarga Division. Estimate Rs. 47,800. Outlay to end of the year was Rs. 24,693.
4. The Munsiff's Court at Sedam, Gulbarga Division. Estimate Rs. 42,550. Outlay to the end of the year was Rs. 42,548.

#### MEDICAL BUILDINGS.

The T. B. Sanatorium on the Ananthagiri hills, near Vicarabad. Estimate Rs. 13,00,000. Outlay to end of the year was Rs. 3,87,270.

*Agricultural Buildings.*—The Laboratory and office building for the Cotton Research Station at Nanded, Nanded Division. Estimate Rs. 65,000. Outlay to end of the year was Rs. 57,270. Work has been completed but not finalised for want of sanction to the revised estimate.

*Educational Buildings.*—The Middle School, Madoor, Nalgonda Division. Estimate Rs. 32,810. Outlay to end of the year was Rs. 2,970.

1. *Military Buildings.*—The Military Barracks at Ibrahim Bagh, Golconda. Estimate Rs. 14,20,000. Outlay to end of the year was Rs. 10,54,015.

2. Constructing Commissioned Officers Quarters at Chandrayangutta. Sanctioned amount Rs. 40,600. Expenditure to the end of the year Rs. 13,521.

3. Constructing Commissioned Officers Quarters at Mohammad Ali lines. Sanctioned estimate Rs. 40,400. Expenditure to the end of the year Rs. 12,944.

4. Constructing Barracks for the saluting section of 'A' Battery at Mallapally. Sanctioned amount Rs. 85,100. Expenditure to the end of the year Rs. 9,346.

5. Constructing Mechanical Transport lines at Saifabad. Sanctioned estimate Rs. 3,13,700. Expenditure to the end of the year Rs. 86,183.

6. Constructing 4th Battalion Infantry lines inside Golconda. Sanctioned estimate Rs. 6,19,300. Expenditure to the end of the year Rs. 1,32,295.

*Customs Buildings.*—The Customs Amin's office and quarters at Kanergoan, Parbhani Division. Estimate Rs. 30,200. Outlay to end of the year was Rs. 27,198. Work has been completed but not finalised for want of sanction to the revised estimate.

### BUILDINGS (CAPITAL).

*Residential Buildings.*—The construction of quarters for several departmental officers in the districts were carried out and an expenditure of Rs. 31,326 was incurred during the year in this connection.

*Osmania University Buildings.*—1. *The Physics College.*—This work was started on 24-4-1349 F., with a sanctioned estimate of Rs. 5,77,152. Outlay to end of the year 1351 F. was Rs. 3,75,433.

2. *The Chemistry College.*—This work was started on 10-12-1349 F., with a sanctioned estimate of Rs. 7,44,506. Outlay to end of the year 1351 F. was Rs. 3,86,744.

3. *The Botany and Zoology College.*—This work was started on 24-5-1349 F., with a sanctioned estimate of Rs. 7,17,576. Outlay to end of 1351 F. was Rs. 4,13,724.

4. *The Technical College.*—This work was started on 17-8-1350 F. with a sanctioned estimate of Rs. 6,00,000. Outlay to end of 1351 F. was Rs. 1,81,322.

*District Police Buildings.*—The construction of several District Police Buildings in accordance with the departmental programme of construction was also carried out during the year. A list of such works of the value of Rs. 25,000 or above, which were either completed or were in progress in 1351 F., is given in Appendix 'A.' The total expenditure on the construction of these buildings was Rs. 68,870 for the year.

*Central Secretariat Buildings.*—The acquisition of buildings and sites on the western side has been completed with the exception of that of one building and a few mud huts. The total cost of acquisition of properties on the western side to the end of 1351 F. was Rs. 15,18,886.

On the western side 19 buildings and 39 mud huts with 3.45 acres of site were acquired at a cost of Rs. 3,04,053 during the year 1351 F.

Valuation work of buildings and gardens for the acquisition of more sites both on the western and the eastern sides is in progress.

The total expenditure incurred on this scheme up to end of 1351 F. was Rs. 20,65,028.

#### COMMUNICATIONS.

*Road Board.*—The Road Board met on the 21st Dai, 1351 F. and approval was accorded to the construction of several original road works, bridges, causeways, etc., and to metalling and dust-proofing of certain existing roads.

## NEW ROAD WORKS.

The following works remained in progress at the end of the year:—

Serial No.	Name of work	Metal or Muram	Length M. F.	Estimated cost	Outlay to end of 1851 F.
	<i>Nirmal Division</i>			Rs.	
1	The Bypass Road near Adilabad .. ..	Metal	2 0	30,240	27,954
	<i>Mahboobnagar Division</i>				
2	The Godabelle Branch Road .. ..	do	3 3½	40,200	20,965
	<i>Gulbarga Division</i>				
3	The Road from Gangapur Ry. Station to Gangapur Village .. ..	do	13 0	20,885	15,048
	<i>Parbhani Division</i>				
4	The Chondi-Ardhapur Road .. ..	do	28 0½	5,64,700	2,02,071
	<i>Hyderabad Division</i>				
5	The Division Road, mile 10 to 12 of the Hyderabad-Nagpur Road ..	do	2 0	21,000	12,865
	<i>Nizamsagar Division</i>				
6	The Road from Ali-Sagar Village to Ali-Sagar Railway Station ..	do	1 5	33,000	22,482
7	The Ghanpur-Munerpally Road .. ..	do	5 4	81,000	61,075
8	The Varni-Jakora Road ..	do	1 6	18,000	15,026
9	The Chord Road connecting the Bodhan Narsu with the Bodhan-Banswada Road ..	do	1 5	30,450	10,515

### IMPROVEMENTS TO EXISTING ROADS.

These mainly include the conversion of the muram surface of roads into metalled surface so that the roads may withstand the rigours of traffic, improving the curves and grades, providing masonry works and constructing causeways and bridges across unbridged streams to ensure swift and uninterrupted traffic.

A list of the important works under this class, which were either completed or remained in progress during 1351 F., is given in Appendix ' B.'

### ROAD FUND WORKS.

The cost of these road works is met from the annual allotment of Rs. 5 lakhs provided by Government: Rs. 3 lakhs from the Petrol Cess Subvention and Rs. 2 lakhs from the proceeds of the State Vehicles Tax. The expenditure incurred during the year against this grant was Rs. 2,91,767.



The works falling under this category, which were either completed or remained in progress during the year are noted below:—

Serial No.	Name of work	Length M. F.	Estimated cost	Outlay to end of 1851 F.	Remarks
	<b>I. WORKS OF WHICH THE COST IS MET FROM THE PETROL CESS.</b>		Rs.	Rs.	
	<i>Mahboobnagar Division.</i>				
1	The Krishna Bridge near Deosagur (Sirat-e-Judi) ..	..	13,28,500	13,24,267	Completed
	<i>Aurangabad Division</i>				
	Masonry works on the Aurangabad-Jalna Road ..	..	1,72,000	18,363	In progress
	<b>II. WORKS OF WHICH THE COST IS MET FROM THE VEHICLES TAX FUNDS</b>				
	<i>Hyderabad Division</i>				
1	Dust proofing the Begum-pet-Secunderabad Road ..	1 7	96,000	96,478	Completed
2	Widening and improving the Secunderabad-Opal Road ..	2 3	54,600	52,287	do
3	Dust proofing the Secunderabad-Opal Road ..	2 3	1,00,400	..	..
	<i>Aurangabad Division</i>				
1	Dust proofing the Jalna Town Road ..	1 4	62,100	52,267	Completed
2	Dust proofing portion of the Aurangabad-Nandgaon Road in the Cantonment limits ..	0 6	30,000	16,541	In progress
3	Dust proofing the Aurangabad Town Road ..	2 1	1,27,490	22,529	do
4	Dust proofing the Road from the Khidki gate to the Railway Station (Aurangabad) ..	..	65,780	45,360	do

## TOTAL MILEAGE OF ROADS.

The total mileage of Roads under the maintenance of the P.W.D. at the end of 1350 F. was 5336 as against 5223 at the end of the previous year; details for the year 1350 F. are given below:—

*Total mileage of roads under the control of P.W.D. at the end of 1351 Fash.*

District	Metal			Muram			C.C. Roads			G. Total		
	M.	F.	Ft.	M.	F.	Ft.	M.	F.	Ft.	M.	F.	Ft.
Hyderabad ..	195	5	399	130	4	330	4	2	0	330	4	0
Medak ..	286	1	0	89	1	0				305	2	0
Nalgonda ..	173	3	339	325	0	330				498	4	0
Warangal ..	396	1	0	93	2	330				489	3	330
Karimnagar ..	213	0	330	61	3	0				274	3	330
Adilabad ..	300	5	293							300	5	293
Nizamabad ..	321	5	0	12	7	0				334	4	0
Aurangabad	486	4	330	1	7	330				488	4	0
Nanded ..	198	3	0	2	0	0				200	3	0
Parbhani ..	162	4	114							162	4	114
Bhir ..	212	2	0							212	2	0
Bidar ..	209	1	330	35	0	0				244	1	330
Osmanabad ..	242	0	330							242	0	330
Gulbarga ..	285	6	330	137	7	0	2	5	0	426	2	330
Raichur ..	310	6	194	110	6	330	4	0	592	425	5	456
Mahbubnagar	36	0	0	365	4	0				401	4	2
Total ..										5336	5	585

## CHAPTER V.

## IRRIGATION (REVENUE ACCOUNT).

The expenditure during the year on irrigation works financed from ordinary revenues was Rs. 24,11,731 as detailed below:—

	Rs.
I. Establishment .. .. .	5,34,661
II. Works:	
Buildings .. .. .	88,743
Communications (Irrigation works) ..	6,688
Preliminary surveys .. .. .	
Original works .. .. .	6,18,696
Periodical, Special & Occasional Repairs .. .. .	
Emergent Repairs by Revenue Department .. .. .	8,43,432
Maintenance of Capital & Irrigation works .. .. .	2,75,146
III. Tools & Plant .. .. .	42,103
IV. Rates and Taxes .. .. .	2,280
V. Suspense .. .. .	—38
<b>Total ..</b>	<b>24,11,731</b>

Repairs either minor, occasional, original or special were undertaken to tanks as usual.

A list of irrigation works of the value of Rs. 10,000 and above which were carried out in the various Divisions during the year is given in Appendix 'C.'

Among the works in progress, the following call for mention:—

1. Restoring Baithpally large tank, Madira Taluq, Warangal District. Estimate Rs. 2,27,300. Expenditure up to the end of Aban 1351 F. was Rs. 1,58,708.

*Progress of work.*

The work on the Reservoir portion has been completed. Channel works were started. An ayacut of about 250 acres was brought under irrigation during 1351 F.

2. Restoring Thorri Cheru, Gangaram, Chen-nur Taluq. O.S. Rs. 1,11,300. Expenditure to the end of 1351 F. was Rs. 96,355.

*Progress of work.*

The work was finalised during the year under report. About 200 acres of irrigation was done during 1351 F.

## CHAPTER VI.

### • IRRIGATION (CAPITAL ACCOUNT).

The outlay during the year on Capital Irrigation was Rs. 1,80,915.

#### *The Nizamsagar Project.*

The following works chargeable to K. A. Irrigation (construction) were carried out.

(a) Chamfering front face of the body wall of the flood gates (weir No. 5) was carried out at a cost of Rs. 842. This work is of great advantage as it appreciably enhances the discharging capacity of the weirs.

(b) The Sub-distributaries 82/14, 82/17, 82/18, 82/21, 82/22 and 82/28 and their branches were in progress and work of the value of Rs. 1,08,562 was carried out.

These waterways open out an area of 31,050 acres in the Armour Taluq for irrigation and development. The land is of good loamy soil and the ryots have already commenced wet cultivation. An area of 33,010 is already served by distributary 82 and its branches. After the entire network of the main irrigation channels, and the field channels is ready, this portion of the commanded area of the project will form an asset.

*Field Channels.*—Field channels of the total length of 32.63 miles were excavated during the year at a cost of Rs. 10,360 on the requisition of the Revenue Department.

*Annual Maintenance.*—The annual maintenance of the project amounting to Rs. 3,43,750 of works and establishment was spent on necessary items of works to keep the system in efficient order.

*Experiments and Research work.*—The experiments conducted for obtaining scientific and statistic data are grouped as under:—

1. Crop experiments in various soils in the whole of the commanded area of the Nizamsagar canal for determining the average yield of the crop.
2. Collection of data for test of cultivation.
3. Experiment for rates for water both under distributaries and water wells.
4. Current meter experiments for gauging discharges of canal.
5. Experiments of paddy cultivation in virgin black cotton soil.
6. Compilation of sluice ayacut, preparation of village maps showing the distributaries and their command.

*Development of Irrigation.*

The following figures show the progress of Irrigation under the project:—

Fasli year	Dry land converted into wet	Baghath converted into wet	Single crop converted into double	Total Cols. 2 to 4	Existing wet lands	Total Cols. 5 and 6	Sugar-cane
1	2	3	4	5	6	7	8
1341 F. ..	2,334-0	14-0	3,255-0	5,603-0	4,362-12½	9,965-12½	473-0
1342 F. ..	3,620-30	244-0	4,254-12½	8,119-2½	11,056-13½	19,175-16½	962-0
1343 F. .	10,053-14½	188-37½	13,100-10	23,354-22	19,433-39	42,838-21	2,526-0
1344 F. ..	19,729-19½	436-35½	17,999-25½	28,166-½	26,951-35½	65,117-36½	5,508-0
1345 F. ..	2,109-16	446-18½	19,570-38½	40,126-33	25,992-16½	65,219-9½	6,536-0
1346 F. ..	31,653-17½	446-26	21,461-5½	53,561-8½	29,094-29½	82,655-38½	1,971-0
1347 F. ..	26,062-13½	516-1	22,370-36½	48,949-10½	27,215-5	76,164-15½	3,767-0
1348 F. ..	36,468-12½	532-20	23,167-37	60,168-29½	27,229-27½	87,398-16½	6,436-0
1349 F. ..	39,353-32½	532-25	23,951-4½	63,837-22	28,475-39½	92,313-12½	10,450-0
1350 F. ..	50,002-27½	536-20	28,097-13½	78,100-½	31,295-22½	1,09,395-22½	8,524-17½
1351 F. ..	49,406-½	506-32½	27,558-37½	76,965-0	31,265-10	1,07,230-10	20,564-0 (approx.)

### *The Wyra Project.*

*Reservoir.*—There was only 3'-9½" of water in the reservoir at the commencement of the monsoon, i.e., on 31-8-50 F. Though there were some scanty showers at intervals, there was no appreciable inflow into the reservoir. Water was let out for nursery purposes on 31-9-50 F. when there was 4' to 4½" of water in the reservoir. The reservoir suffered for want of water even up to the end of Abi season. With great difficulty 2 to 3 hundred acres were transplanted in the first reaches. Never in the history of this project was irrigation so bad and the disappointment of the ryots was great. The ryots grew jawari in the remaining abi area, leaving about 2,000 acres for Tabi. There was heavy and welcome rainfall on 2nd and 3rd Azur 1351 F. which brought enough water into the reservoir, which had an actual surplus on 4-1-51 F. when the water level was 18'-3". The yield of Jawari crop was good. The total Rabi done was 600 acres.

*Field Channels.*—No fresh field channels were excavated during the year. The existing field channels serve an area of 16,258. The balance to make the total ayacut of 17,390 acres will be attended to only as the irrigation expands.

*Annual Maintenance.*—The annual maintenance grant of Rs. 17,500 was spent during the year on the proper upkeep of the reservoir and the canal system.

*Development of Irrigation.*—The extent of irrigation since the commencement of project is as under:—

<i>Fasli.</i>	<i>Acres.</i>
1340	.. 2,280
1341	.. 3,585
1342	.. 7,912
1343	.. 11,941
1344	.. 13,495
1345	.. 9,249
1346	.. 13,595
1347	.. 13,664
1348	.. 13,751
1349	.. 9,906
1350	.. 13,281
1351	.. 870
• Anticipated irrigation	.. 17,390

### *The Palair Project.*

*Reservoir.*—There was 14'-10" of water at the commencement of the monsoon, *i.e.*, on 31-8-50 F. Water was let out for cultivation on 9-9-50 F. up to bifurcation point. The ryots clamoured for cultivation under Relief Fund and also in Acharlaguda. Owing to poor rainfall during the first part of the monsoon, cultivation under Relief Fund was abandoned. Water was let out from a few sluices under Acharlaguda channels and about 800 acres were transplanted with difficulty. The crops were however saved as the reservoir got some inflow just at the end of Mehir.

*Annual Maintenance.*—The annual maintenance grant of Rs. 21,000 was spent for the upkeep of the reservoir and the canal system.

*Development of Irrigation.*—The area cultivated from the commencement of the project is as under:—

<i>Faski.</i>	<i>Acres.</i>
1337	.. 551
1338	.. 2,565
1339	.. 4,248
1340	.. 3,565
1341	.. 5,860
1342	.. 8,449
1343	.. 9,714
1344	.. 12,729
1345	.. 12,890
1346	.. 6,607
1347	.. 12,860
1348	.. 7,341
1349	.. 6,582
1350	.. 11,067
1351	.. 7,976
The anticipated irrigation.	19,650

### *Singabhupaliyam Project.*

All the works provided in the sanctioned revised estimate were executed by the end of 1349 F. except for the excavation of Local Fund channel beyond mile 3 with its masonry works. Estimates for the Local Fund channel

beyond mile 3 are under revision and the revised estimate of the project will be submitted for sanction providing for the above works.

*Development of Irrigation.*—This project is designed to irrigate 3,030 acres. Field channels to serve an area of 1,500 acres were ready before the Abi season of 1351 F. and the cultivation done was only to the extent of 321 acres. This was primarily due to special repairs works in progress as well as failure of monsoons in 1350 F. The progress of irrigation is not satisfactory.

## CHAPTER VII.

### FAMINE RELIEF WORKS.

The total expenditure incurred during the year on works chargeable to Famine Grant was Rs. 23,11,430 of which a sum of Rs. 15,22,996 was spent on irrigation works including the Dindi project and thus Rs. 7,88,434 were spent on roads.

At the close of Mehir 1350 F. signs of famine were observed in the Warangal and Nalgonda Divisions. With a view to afford relief to the famine stricken people, 37 famine test works costing Rs. 1.41 lakhs were continued during the year under report.

The total number of labourers employed on relief works in the divisions of Warangal Circle up to the end of the year is given below:—

Warangal Division	..	155,938
Nalgonda Division	..	72,130

### IRRIGATION WORKS.

The important work in progress during the year was the Dindi Project, Kalvakurthy Taluq, Mahbubnagar District.

The project was undertaken in Isfandar 1349 F. on a sanctioned estimate of Rs. 35,30,000.



The following works were in progress during the year under review:—

(a) *Ogee Dam*.—The masonry work of Ogee Dam was started on 3-7-1350 F. The dam rose up to the height for the complete length from Ch. 28.50 to 38.50 during the year under report. Left flank has been raised above F.T.L. This bank, including the sluice, is almost complete. On the right flank the embankment was slightly lower than that on the left flank.

Work on 1st reach of canal consisting of cutting and banking with deep cutting between Ch.229.16 to 236 and 190 to 204 is in progress. Work is also in progress on 3rd and 4th sections of canal.

The expenditure on Dindi project in 1351 F. was Rs. 46,426 and the total expenditure is Rs. 14,50,043.

(b) *Kandkur Well*.—This is a trench well excavated at Kandkur across one of the local streams within the commanded area of the project on an estimate of Rs. 12,000. The result of light irrigation of the test farm opened under this well over an area of 70 acres is so far promising.

(c) *Ayacut Road*.—A grant of Rs. 1,20,000 was made by the Famine Board for the construction of ayacut roads. The work comprises of:—

1. A main road 23 miles 4 furlongs long from Devarkonda to the site of the dam.
2. A branch road 3 miles 4 furlongs long passing through Bolempally to the Pedda Vagu river at Kandkur.

Both the works are under active progress and the expenditure incurred on them during the year was Rs. 46,426.

(d) *Irrigation under the Project*.—The project is designed for an irrigation of 39,000 acres.

Lastly, all amenities, such as medical relief, sanitary arrangements, postal and police services, school and Co-operative Society for labourers, have been provided for the benefit of the staff, contractors and their employees and labourers in general.

*Road Works.*—The works which remained in progress at the end of the year were the following:—

Serial No.	Name of work	Amount of estimate	Expenditure to end of 1851 F.	Remarks
	<i>Nalgonda Division.</i>	Rs.	Rs.	
1	Constructing the Peddamunagal-Elleswaram Road (14 miles) ..	1,07,800	26,670	
	<i>Kareemnagar Division.</i>			
2	Constructing the Parkal-Mahadevpur Road I Section (16 miles) ..	2,92,760	84,488	
3	Constructing the Elkathurthy-Siddipet Road I Section (14 miles) ..	1,75,764	68,326	Started as relief work in 40 F. now continued on normal lines
4	Do II Section (14 miles)	1,92,551	11,917	do
5	Constructing the Nandikonda-Shabazpalli Road (10 miles 5 furlongs) ..	R.E. 1,10,000	92,095	do
6	Constructing the Kareemnagar-Laxetipet Road (18 miles) ..	2,84,944	1,04,421	do
	<i>Asifabad Division.</i>			
7	Constructing the Asifabad-Utnoor Road upto Ada Village ( 5 miles) ..	R.E. 85,488	79,864	
8	Constructing the Raipatnam Luxettipet Road (2 miles 1 furlong) ..	R.E. 46,856	39,990	
	<i>Gulbarga Division.</i>			
9	Constructing the Gogi-Malli Road (26 miles, 5 furlongs)	3,24,618	2,66,947	
10	Constructing the Kodaikal-Balsethital Section of the Musgi-Kodaikal Road ..	1,12,700	30,000	
11	Constructing the Mallakhamtalla Road ..	1,04,491	35,499	
	<i>The Raichur Division</i>			
12	Metalling the Thadergira-Gangawathy Road (18 miles, 5½ furlongs) ..	1,22,137	96,335	
13	Constructing the Sindhnoor-Dhadesagar Road ..	1,15,000	39,943	
14	Constructing the Lingsugur-Hutti Road ..	1,18,400	19,976	

## CHAPTER VIII.

## HYDERABAD WATER WORKS.

The outlay during the year is detailed below:—

		Rs.
Establishment	..	74,758
Running and Maintenance		3,57,559
Works	.. ..	..
Minor works	.. ..	..
Tools and Plant	..	2,895
Suspense	.. ..	..
Rates and Taxes	..	156
Total		4,35,368

The following important works were carried out during the year:—

Serial No.	Name of works	Amount of estimate	Expenditure to end of 1851 F.	Remarks
		Rs.	Rs.	
1	18" Trunk Main from the Secunderabad Junction to the proposed Pump House beyond the Alexandra Road	90,000	74,784	Nearing completion
2	Water supply for new Aghapura and the C.I.B. quarters	14,410	2,975	In progress
3	R.G. Filters for the Himayatsagar system near the Mir Alam Tank .. ..	4,80,000	1,64,607	do
4	Independent water supply for the proposed Govt. Factory and the proposed convalescent Home at 'Eramnuma'	3,17,000	1,44,477	do

## REMODELLING SCHEME.

The second instalment of Remodelling is estimated to cost Rs. 27.42 lakhs. Out of which the work of pumping Himayatsagar water through Irsalgundy channel and Mir Alam Tank to Aliabad Service Reservoir costing Rs. 2.62

lakhs was finished last year and the work of the Rapid Gravity Filters was sanctioned for Rs. 4.8 lakhs and is in progress. Besides the estimate for remodelling the distribution system, etc., costing Rs. 20 lakhs which form part of second instalment is under Government consideration.

The construction of the settling tanks was practically completed during the year. The construction of the Chemical House, filters proper and the Administration Block are in progress.

#### TOTAL LENGTH OF NEW MAINS.

During the year a total length of about 6,350 ft. of new mains ranging from 3" to 10" in diameter was laid.

#### PRIVATE PIPE CONNECTIONS.

The number of fresh private connections sanctioned during the year was 75. The total number of connections on the rolls at the end of the year was 18,721. Of these, 2,060 are metered. The number of connections to Drainage works stood at 516 and free connections to places of public worship numbered 730. A thorough investigation, and reassessment of all private connections was in progress during the year.

#### FIRE-HYDRANTS, STAND-POSTS, ETC.

The total number of Stand-posts, Fire-Hydrants, etc. at the end of the year was as follows:—

1. Ordinary Stand-posts	..	901
2. Stand-posts combined into Fire-hydrants	..	129
3. Shower Stand-posts	..	11
4. Surface Fire-hydrants	..	383
5. Cattle Troughs	..	24

#### QUANTITY OF WATER SUPPLIED.

The lakes which constitute sources of supply stood at the end of the previous year at a much lower level than their full supply level. As the rainfall was again unsatisfactory during the year, they received insufficient replenishment and in consequence stood at a yet lower level at the end of the year. Osmansagar, in

particular, caused great anxiety. The minimum level reached was 3 inches below the outlet sluice, by far the lowest level in the history of the lake, necessitating emergency pumping of water into the conduit for 2½ months.

The quantity of filtered water supplied to the city during the year averaged 17.72 M.G. per day. As explained above the low level of water in Osmansagar was a source of great anxiety during the year. On 27-6-1351 F. the level of the lake fell to R.L. 1760.25 and it became impossible to pass through the conduit the requisite flow by gravity. Emergency pumping operations were, therefore, started on this day, for the first time in the history of the lake, and were continued till 15-9-1351 F. when the level rose to R.L. 1763.50. At the end of the year, the level of the lake was R.L. 1770.17, which was about 3 ft. higher than the corresponding level of the previous year, but not so satisfactory as to relieve the department of anxiety in this behalf.

The special measures adopted during the previous year, such as the reduction of the hour of water supply, the refusal to instal new private pipe connections, etc., were continued during the year. Further to make up for the inadequate supply from Osmansagar, the pumping of unfiltered but chlorinated water from the Mir Alam Tank was continued during the year, this water being supplied to the Aliabad and Mysaram Zones and to parts of the Karwan, Mongalhat and Mallapalli areas.

During the year, a special committee, under the distinguished Chairmanship of Nawab Ali Nawaz Jung Bahadur was appointed by Government to investigate the position of water supply for the city of Hyderabad arising from repeated failures of monsoon. The report of the committee is under the consideration of Government.

## CHAPTER IX.

### THE HYDERABAD CITY SURVEY & STORES.

The Hyderabad City Survey staff carried out the following principal works during the year:—

1. Correction of the Original Municipal Survey Maps (50'=1") in view of the development of the city.

2. Plotting on the original sheets of 50' = 1" scale, the accurate positions of man-holes, electric poles, sluice valves, etc.

The total amount spent up to the end of the year against the sanctioned estimate of Rs. 10,100 for printing maps of the Hyderabad City and Suburbs on different scales was Rs.

The expenditure incurred on the maintenance of the survey staff during the year was Rs. 10,146 while the revenue realised from the sale of maps and the miscellaneous job works carried out was Rs. 1,189.

## CHAPTER X.

### P.W.D. WORKSHOP.

Mr. S. K. Iyer, B.E., was in charge of the workshop throughout the year.

The total number of job works undertaken during the year was 762, of which 417, of the value of Rs. 4,70,197, were completed.

The shops were engaged in reconditioning steam and Diesel rollers and also attended to the routine work of machining parts of steam road rollers, such as hind and front rims, threading piston rods and cutting gear and worn wheels, etc. Machining replacement parts for the Electricity Department. Machining shutters and plugs for the Irrigation department and cutting teeth in steel blanks supplied by the R. M. T. S.

The total number of team road rollers repaired and reconditioned during the year was 49, costing O.S. Rs. 28,085. In addition to normal activities, the workshop also attended to the requirements of other departments, *e.g.*, manufacturing double headed sirens for the Telephone department, machining cast iron pipes for the E.G. 4 Factory, Hyderabad Water Works and the Sirpur Paper Mills, besides cutting teeth inside a clutch drum for the Sirpur Paper Mills.

The workshop continued contributing to the war effort of the State, by carrying out war production works. Slitting Aluminium brake bands, machining cooker jets, retaining plates, level pull rods, box-pipes and air release

valves and manufacturing ammunition boxes, cooker jets, etc., formed the main items of the war work executed.

Lastly, the shops were utilised as a training ground for artisans under the Hyderabad Technical Training Schemes. On an average, 30 students were trained monthly.

The expenditure on supervision establishment charged to Major Head 31-Buildings and Communications during the year amounted to Rs. 25,013. • .

## CHAPTER XI.

### HYDERABAD CITY DRAINAGE.

Mr. J. N. Gangulee, M.R. San. I., A.M.I.S.E. (India), Assistant Engineer, officiated as Executive Engineer in addition to his own duties throughout the year under report except for a few weeks in Aban 1351 F.

The expenditure during the year was Rs. 4,38,252 against the grant of Rs. 5,00,000 as detailed below:—

	Expenditure Rs.
Establishment charges including audit contribution, etc. ..	95,648
Original works including Tools and Plant .. ..	2,42,604
Maintenance works .. ..	1,40,000
	<hr/>
Total ..	4,78,252

Besides the usual grant of Rs. 5,00,000 the department also received by transfers from the Public Works Department a sum of Rs. 31,599 for the maintenance of concrete roads and the expenditure against it was Rs. 22,511.

### PROGRESS OF WORKS.

*Sewage Disposal Works.*—The following maintenance works were carried out during the year:—

1. Providing and fixing 'V' notches to sluice. These 'V' notches were introduced to keep record of exact quantity of water supplied to each crop.

2. Fixing iron joists in front of sluice disc of Uppal channel.
3. Closing cistern holes of Uppal channel.
4. Repairs to breach of bund at sluice 18.
5. Raising and levelling man-hole covers on out-fall sewage.

#### PURIFICATION PLANT.

The purification plant worked satisfactorily throughout the year. The Grit Chambers A and B with preliminary tanks A and B were in operation, with the septic tanks D and E throughout the year.

The flow through the above tanks steadily increased during the rainy and cold season of the year to 230,000 gallons per hour which during the hot months it fell to 35,000 gallons per hour.

The total quantity of sewage that passed through the Disposal works during the year under report was 906.98 million gallons or 145.11 M. Cft. against 1130.34 million gallons or 180.85 M. Cft. in 1350 F. The quantity of storm water that passed this year through the storm water overflow constructed at the Sultan Bazaar Drainage outfall was 36,320,000 gallons or 5.81 M. Cft. against 24,682,000 gallons or 3.94 M. Cft. in 1350 Fasli.

The total quantity of grit removed from the different stages of the Disposal works in the year 1351 F. was 7,316 Cft. as against 12,622 Cft. in the year 1350 F. as shown below:—

S. No.	Stage from which Grit was removed.	Quantity removed.	
		1350 F. Cft.	1351 F. Cft.
1.	Musi Syphon (Inlet and Outlet Man-holes) .. ..	350	592
2.	Lingampalli Syphon (outfall service) .. ..	3,672	3,744
3.	Disposal works.—		
	(a) Grit Chamber 'A' .. ..	..	2,980
	(b) do. 'B' .. ..	6,840	..
	(c) do. 'C' .. ..	1,760	..
	Total Cft. ..	12,622	7,316



Thus the total quantity of grit brought down and removed from the Disposal Works in the year 1351 F. was 7,316 Cft., which works out at  $1/19834$ th part of the 145.11 M. Cft. of sewage passed through the Purification Plant against 12,622 Cft. of grit removed in 1350 F. which works out at  $1/14249$ th part of the 180.85 M. Cft. of sewage dealt with in the year 1350 F.

No sludge was removed during the year either from preliminary or septic tanks.

Samples of sewage obtained from the marginally noted stages of purification were analysed chemically at the Laboratory attached to the Disposal works. For comparison samples of fresh water from Uppal channel and sewage from Lingampalli and Musi syphons, Sultan Bazaar outfall and other places were also examined occasionally. Such analysis was carried out during the year 208 times against 212 times in the year 1350 F. The results of the analysis show that the Purification Plant was working with a high sedimentation efficiency of 80 to 90 per cent. and a purification efficiency of albuminoid reduction and oxygen absorption of 50 to 60 per cent. These figures prove that the Purification Plant was functioning quite satisfactorily.

#### EFFLUENT IRRIGATION.

The area under the command of the effluent irrigation channel was 1,500 acres of which 1,103 acres were irrigable the rest being elevated and waste lands. During the year, 844.9 acres of Abi and 603.5 acres of Tabi crops were cultivated by the ryots against 739 acres of Abi and 1,172 acres of Tabi crops in 1350 F. The revenue realised during the year by the revenue department was Rs. 12,166-9-6 against Rs. 16,382 in 1350 F.

#### EFFLUENT DEMONSTRATION FARM.

Out of the 100 acres which constitute the total area of the Farm, 47 acres were under cultivation. The rest of the land being undulating, was preserved for grazing of the farm cattle. The crops fetched a sum of Rs. 7,916

against Rs. 8,476 in 1350 F. Deducting working expenses amounting to Rs. 4,941, the net profit during the year was Rs. 2,976 against Rs. 4,162 in 1350 F.

Besides supplying the effluent for the cultivation of land by ryots, various experiments were carried out in the Demonstration Farm to determine the crop best suited for effluent irrigation. As regards sugarcane, the planting of it at intervals of 3 months throughout the year induces early and late maturing of the crops. This system is very advantageous as it is likely to enable the effluent to be utilised continuously.

### DISTRICT SEWERS.

Sub-branch sewers were constructed during the year according to requisition received for house connections with public sewers. The total length of sub-branch sewers laid during the year 1351 F. was 10,514 ft. or 1.99 miles and the number of man-holes built during the year was 79. The total length of sewers in the city at the end of 1351 F. was 160 miles  $7\frac{1}{2}$  furlongs and the number of man-holes 5,938.

### PUBLIC FLUSHING LATRINES, PAIL DUMPING PITS & URINALS.

During the period under review 2 public flushing latrines, 1 pail dumping pit and 2 urinals were completed.

The total number at the end of 1351 F. was 82 public flushing latrines, 175 pail dumping pits and 55 urinals.

### CONSTRUCTION WORKS.

The estimate for the following 2 major works were received duly sanctioned during the latter part of the year 1351 F. and the expenditure incurred on this to the end of the year was Rs. 24,900.

	Rs.
1. Constructing Sub-branch Sewer Drain at Humayunnagar ..	21,530
2. Laying Main Sewer and Sub-branches in the Sultan Bazaar area .. ..	35,054

## MAINTENANCE OF DISTRICT SEWERS.

The departmental labour gangs attended to the usual maintenance of sewers man-holes, automatic syphon of sewers, public latrine and urinals.

During the year under review 26,738 Cft. of silt and 7,187 lbs. of roots were removed from the sewer drains as against 19,760 Cft. of silt and 3,985 lbs. of roots removed in the year 1350 F. There were 264 chokages against 359 in 1350 F.

## HOUSE CONNECTIONS.

The number of houses connected with the sewage system during the year was 170 bringing the total number of connections to 4,839 at the end of 1351 F.

## CEMENT CONCRETE ROADS.

During the year, the muram edges and muram berms of 16.20 miles of cement concrete roads were maintained at a cost of Rs. 5,423. 2,032 Sq. ft. of cement concrete road surface were cut and repaired for 60 requisitions from the Drainage and other Departments at a cost of Rs. 1,485. As before the joint filling of the central belt of 20 ft. of cement concrete road was maintained with colas and coal tar respectively at a cost of Rs. 2,668.

## CHAPTER XII.

### THE TELEPHONE DEPARTMENT.

During the year under report Mr. Syed Abdul Quader, Assistant Superintendent, discharged the duties of Telephone Superintendent and held charge of the Palace Lighting works in addition.

The exchange at Narayanguda intended for the King Koti Mubarak and certain Royal Palaces continued to function under the Magneto system. The automatic exchange at Gowliguda functioned satisfactorily. During the year under report there was an unprecedented demand for telephone connections and in the normal course the increase in the number of telephones would have been

more than 300, but owing to the Telephone instruments being not available, many applications for new connections had to be refused. In certain cases, the subscribers themselves procured telephone instruments and connections were given. To meet the demand for telephone connections to A.R.P. Warden Posts and other essential services like the Police and the Army, a Committee of four members, with the Chief Engineer and Secretary to Government, P.W.D., as Chairman and the Superintendent, Telephone Department, as the Secretary was formed to investigate the possibility of curtailing the number of Telephones in Government offices, by removing those that were not necessary and thus rendering them available for the A.R.P. and other Headquarters. By the end of the year, a basis for the proposed curtailment had been determined and a list of telephones to be removed was under circulation among the members of the above committee for expression of opinion.

Since the new cables were put into commission the service has considerably improved and there is general satisfaction. The instruments on subscribers, premises were looked after with the usual care. As usual a rigid watch was maintained over the operation staff on Toll Board.

During the year under report one more private Automatic Exchange was installed, making a total of 11 in the various offices and palaces in the City.

The telephone service between Hyderabad and Warangal, between Jalna and Aurangabad and the local service at Raichur continued to operate during the year.

[Statement.

The following table shows the capital outlay on the city and district Telephones and the number of subscribers at the end of 1351 F. as compared with the figures for the previous year.

Exchange	Capital outlay to end of 1351 F.	No. OF SUBSCRIBERS AT THE END OF 1350 FASLI		No. OF SUBSCRIBERS AT THE END OF 1351 FASLI	
		Main telephone	Extension	Main telephone	Extension
	Rs.				
Hyderabad City ..	19,49,240	1,315	333	1,541	321
Warangal with Trunk call offices at Bhongir and Jangaon	2,71,963	56 9	} ..	70 11	}
		40		47	
Aurangabad and Jalna	1,40,648	21	} ..	21	}
Raichur ..	50,887	9		10	
Total ..	24,11,738	1,450	333	1,700	321

The financial results for the year 1351 F. as compared with the previous year are as detailed below:—

Exchange	RECEIPTS		EXPENDITURE		PROFIT OR DEFICIT	
	1350 F.	1351 F.	1350 F.	1351 F.	1350 F.	1351 F.
Hyderabad City ..	2,86,050	3,36,265	2,47,010	2,52,317	+39,040	+83,948
Warangal including Bhongir & Jalna ..	21,733	30,649	35,377	37,816	-13,644	-7,167
Aurangabad. Jalna ..	9,457	11,945	24,256	24,510	-14,799	-12,565
Raichur ..	1,422	1,627	7,233	7,287	-5,811	-5,660
Total ..	3,18,662	3,80,486	3,13,876	3,21,930	-4,786	+58,556

The following statement shows the outstanding against subscribers at the end of 1351 F. as against previous year:—

Exchange	Outstanding at the end of 1350 F.	Outstanding at the end of 1351 F.	Increase or decrease
Hyderabad City .. ..	1,81,682	2,39,236	+ 57,604
Warangal including Bhongir and Jangoan .. ..	31,089	29,084	— 2,005
Aurangabad and Jalna ..	6,088	5,782	— 256
Raichur .. ..	2,202	2,888	+ 686
Total outstanding	2,20,961	2,76,990	+ 56,029

No new installation was sanctioned by Government during the year.

During the year under report the All-India Trunk line was connected with our State Telephone system on 19-11-1351 F. Thus our subscribers can speak with any part in India. Schemes were formulated for the establishment of an internal Telephone System for connecting the Capital with all the District Headquarters and were accepted by Government in broad outline, but are still pending execution owing to the abnormal conditions resulting from the present international situation. As soon as circumstances permit, the work will be taken in hand.

## CHAPTER XIII.

### THE DISTRICT ELECTRICITY DEPARTMENT.

During the year under review, the administration of the District Power Schemes continued, as usual, under the control of Chief Engineer and Secretary to Government, P.W.D. Mr. Syed Abdul Quader, B.Sc. (Madras), B.Sc. (Hon.) (Manchester), A.M.I.E., continued to be Special Engineer of this Department in addition to his duties as Superintendent, Telephone Department. Mr. Mohd. Maqdoom Hussaini, B.A. (Alig.), A.C.G.I. (London), continued as Assistant Special Engineer throughout the year.

The number of towns electrified remained the same as in the previous year.

The Power House at Aurangabad, Raichur, Nizamabad, Gulbarga, Yadgir and Narayanpet, continued to generate the energy necessary for distribution at the said places. As before, the Azam Jahi Mills supplied power for the electrification of Warangal Town. During the latter part of the year under review, power for the electrification of Nanded and Gulbarga towns was obtained from the Osman Shahi Mills, Nanded, and the M. S. K. Mills, Gulbarga, respectively.

[*Statement.*

*The number of units of energy generated or purchased and the units sold by each district concerned during the year as compared with the figures for 1950 F. is given below.*

Name of Scheme	1850 FASLI				1851 FASLI			
	Generated	Purchased	Total	Sold	Generated	Purchased	Total	Sold
Aurangabad	6,39,507	..	6,39,507	5,18,879	6,08,179	..	5,08,179	4,87,308
Raichur	14,66,530	..	14,66,530	12,84,258	14,01,060	..	14,01,060	12,48,094
Nizamabad	3,00,725	..	3,00,725	2,15,838	2,95,018	..	2,95,018	2,22,226
Warangal	..	4,88,310	4,88,310	3,60,951	..	5,10,394	5,10,394	4,31,819
Nanded	3,08,648	..	3,08,648	1,48,505	91,848	2,25,970	3,17,318	2,83,760
Gulbarga	2,08,168	..	2,08,168	1,60,142	50,414	2,06,359	2,56,773	2,08,925
Yadgir	20,974	..	20,974	18,157	27,474	..	27,474	24,529
Narayanpet	37,599	..	37,599	34,891	38,949	..	38,949	35,875

The above table of figures shows that there was an increase of consumption of current at all stations, except at Aurangabad and Raichur, compared with the preceding year. This was partially due to the reduction in the hours of supply at some places on account of difficulties in procuring (a) sufficient crude oil to run the engines for 24 hours. (b) new parts to replace the unserviceable parts of old engines.



The following table shows the capital outlay on the schemes and the receipts and expenditure during the year:—

Name of Scheme	Capital Govt. advance	RECEIPTS		Expenditure with depreciation for 1851 F.	Surplus(+) deficit (—) with depreciation
		1850 F.	1851 F.		
Aurangabad ..	5,38,723	1,14,461	1,14,504	1,02,322	+ 11,682
Raichur ..	6,49,192	1,28,953	1,26,667	1,21,838	+ 4,880
Nizamabad ..	3,51,256	50,252	51,425	63,489	— 12,063
Warangal ..	3,88,039	77,404	85,355	73,682	+ 11,672
Nanded ..	2,44,856	42,877	49,913	57,485	— 7,572
Gulbarga ..	4,25,175	50,182	65,108	68,186	— 4,167
Narayanpet ..	61,463	9,987	10,090	16,531	— 6,441
Yadgir ..	54,431	7,903	9,293	12,603	— 3,816
Total 1850 F. }	27,13,145	4,81,973		4,98,751	— 16,788
1851 F. }		5,11,186		5,16,640	— 5,374

A glance at the above table shows that the income of all the stations, except the one at Raichur, has increased. There was an increase of 6 per cent. in the total revenue and an increase of 3.6 per cent. in the total expenditure, including depreciation charges, which is a very encouraging feature, particularly in view of the exorbitant increase in the cost of all the materials. The total deficit for the year is about 1/3 of that for the last year. It is a relief to find the deficit so low despite war conditions. Even this deficit would have been wiped off completely this year, had it not been for the abnormal rise in the expenditure on maintenance and running of plants and machineries. Thus the financial condition of the concerns taken as a whole, has improved and the concerns are expected to show profits, even after meeting the interest charges, as soon as the present unstable economic conditions due to war disappear.

(Sd.) MD. AHMED MIRZA,  
*Chief Engineer and Secretary, P.W.D.,*  
*(Roads, Buildings, etc.)*

## APPENDIX A.

List of District Police Buildings of the value of Rs. 25,000 and above which were either completed or remained under construction in 1351 F.

Serial No.	Name of work	Estimated cost	Outlay to end of 1351 F.	Remarks
	<i>Warangal Division.</i>			
1	Police staff quarters at Boorgampad ..	24,980	16,992	Complete
2	Police buildings at Kothagudam ..	32,060	249	In progress
	<i>Aurangabad Division.</i>			
3	Police staff quarters at Jalna ..	64,950	27,889	Complete
	<i>Parbhani Division.</i>			
4	Police station and staff quarters at Goregoan .. ..	39,200	29,511	do
	<i>Nanded Division</i>			
5	Police staff quarters at Deglur ..	30,000	26,792	do
	<i>Nirmal Division</i>			
6	Police buildings at Adilabad ..	35,950	92	In progress
	<i>Medak Division.</i>			
7	Police buildings at Sadasivpet ..	31,270	718	do
	<i>Gulbarga Division.</i>			
8	Police buildings at Saidapur ..	28,230	28,357	Complete
	<i>Raichur Division.</i>			
9	2nd class Police station house and Police buildings at Hanamsagar ..	35,508	2,884	In progress

## APPENDIX B.

List of Bridges, causeways, etc., and of road-metalling works, of the value of Rs. 25,000 and above which were either completed or remained under construction in 1351 Fasli.

Serial No.	Name of work	Estimate	Outlay to end of 1351 F.	Remark
<b>PART I.</b>				
<b>BRIDGES, CAUSEWAYS, ETC.</b>				
<i>Nalgonda Division.</i>				
1	Bridge across the Channaram stream on the Nalgonda-Devarkonda Road ..	88,250	..	Complete
2	Causeway across the Musi river at mile 48 on the Kodad-Miryalguda Road ..	1,15,000	1,01,262	do
3	Minor masonry works on the Nalgonda-Devarkonda Road ..	1,39,500	1,12,573	In progre
<i>Aurangabad Division.</i>				
1	Causeway across the Purna and Mukta rivers on the Jalna-Bokerdan Road ..	1,02,000	56,837	Complete
2	Major masonry works on the Aurangabad Jalna Road ..	1,72,000	18,863	In progre
<i>Parbhani Division.</i>				
3	Submersible bridge across the Purna river on the Jintur-Aundah Road ..	2,16,000	69,819	do
<i>Warangal Division.</i>				
1	Bridges across the Vangavelu Vagu and Wyra streams on the Madira-Bonakalu Road ..	30,000	17,568	Comple
2	16 additional culverts on the Pasra-Etoonagaram Road ..	41,550	19,435	In progr
3	Causeway across the Kailapalli Vagu on the Pasra-Etoonagaram Road ..	29,000	4,208	do
<i>Nalgonda Division.</i>				
1	Major masonry works on the Alir-Siddipet Road ..	76,000	10,488	do
<i>Mahbubnagar Division.</i>				
1	Causeway across the Mannanur stream on the Jadcherla-Devarkonda Road ..	40,000	31,671	Comple
2	Causeway across the Magnur stream at mile 107 of the Jadcharla-Krishna Road ..	84,500	88,850	do
<i>Gulbarga Division.</i>				
1	Masonry bridges on the Hyderabad-Bijapur Road ..	43,000	12,429	do
<i>Raichur Division.</i>				

Serial No.	Name of work	Length M. F.		Estimate	Outlay to end of 1851 F.	Remarks
PART II.						
METALLING OF ROADS.						
Medak Division.						
1	The Ghanpur-Narsapur Road ..	19	0	1,10,000	75,077	Completed
2	The Hyderabad-Kareemnagar-Siddipet Road ..	40	4	2,81,000	1,69,531	do
3	The Ramayanpet-Siddipet Road ..	29	0	1,86,200	1,33,302	do
4	Medak-Wadiaram Road ..	16	0	89,000	35,883	Stopped
Warangal Division.						
1	The Khammam-Ashvarampet Road III & IV Sections ..	42	4	3,14,200	1,34,062	In progress
Nalgonda Division.						
1	The Nalgonda-Devarkonda Road ..	36	0	2,08,150	1,72,964	do
2	The Hyderabad-Masulipatam Road (Suriapet Section) ..	10	0	57,800	27,687	do
3	Improvement to the Hyderabad-Masulipatam Road (Suriapet Section) ..	..	..	57,000	6,712	do
4	Improving and metalling the Hyderabad-Masulipatam Road (Parkal Section) ..	3	6	48,000	2,763	do
5	Improving the Jangaon-Suriapet Road ..	53	5	3,32,000	2,77,419	Completed
6	Metalling a portion of the Ibrahimpatam-Mallapally Road ..	..	..	30,150	173	In progress
Mahboobnagar Division.						
1	The Jadcharla-Krishna Road I & II Sections ..	62	0	2,97,300	2,69,736	In progress
2	The Hyderabad-Kurnool Road IV Section ..	57	0	2,89,000	2,14,856	Completed
3	The Faruknagar-Pargi Road ..	32	0	2,06,800	1,94,278	In progress
4	The Hyderabad-Bijapur Road ..	18	0	1,33,000	84,271	do
5	The Mahbubnagar-Kesgi-Tandur Road ..	26	0	1,43,500	97,155	do
6	The Jadcharla-Farhabad Road ..	23	0	1,48,500	90,754	do

Serial No.	Name of work	Length M. F.		Esti- mate	Outlay to end of 1851 F.	Remarks
<i>Gulbarga Division.</i>						
1	The Bijapur Road V Section (Gurumukal-Yadgir Section) ..	32	2½	8,12,810	1,49,251	In progress
2	The Hyderabad-Bijapur Road ..	26	1	1,98,300	82,209	do
<i>Hyderabad Division.</i>						
1	The Hyderabad-Shamirpet Road	7	1	31,000	26,694	Completed
2	The Hyderabad-Karacemnagar Road ..	10	1	57,030	46,637	do
3	The Hyderabad-Yadgir Road ..	30	4	1,45,300	1,29,557	do
4	The remaining portion of the Secunderabad-Uppal Road ..	2	7	28,400	15,780	In progress

## APPENDIX C.

List of Irrigation works charged to Revenue account of the value of Rs. 10,000 and above which were either completed or remained under construction in 1951- F.

Serial No.	Name of work	Amount of estimate	Expenditure to end of 1951 F.	Remarks
<i>Warangal Division.</i>				
1	Restoring Oora Cheru, Thamadpalli, Warangal Taluq .. ..	10,549	9,260	In progress
2	Improvement to irrigation channels under the Lakpawaram tank, Mulug Taluq ..	18,615	10,467	do
3	Special repairs to Koya Cheru, Lingampally, Warangal Taluq .. ..	11,220	9,408	do
4	Special repairs to the Malkapur Feeder channel, Warangal Taluq .. ..	15,140	15,317	Completed
5	Restoring Shambani Cheru, Rollakal, Warangal Taluq .. ..	56,222	54,912	do
6	Restoring Large Tank, Baithpally, Madira Taluq .. ..	2,27,000	1,58,708	In progress
7	Restoring Venkamma Cheru, Ashvaraopet, Madira Taluq .. ..	R.E. 84,370	84,289	Completed
8	Improvements to the Thumboor anicut and channels, Duddipooty, Madira Taluq .. ..	18,780	1,799	In progress
9	Emergent repairs to Pedda Cheru, Ragaboyanguda, Yellandu Taluq .. ..	15,000	5,586	do
10	Special repairs to Pedda Cheru, Kondapur, Khammam Taluq .. ..	14,280	7,442	do
11	Restoring Guttala Cheru, Maddulpalli, Yellandu Taluq .. ..	11,820	10,362	Completed
12	Restoring Mamilla Cheru, Jestapalli, Yellandu Taluq .. ..	15,405	11,174	In progress
13	Restoring Singadi Bandam Cheru, Jestapalli, Yellandu Taluq .. ..	15,000	13,392	Nearing completion
<i>Nalgonda Division.</i>				
1	Restoring Tati Cheru, Koppole, Devarakonda Taluq .. ..	20,100	15,969	Completed
2	Emergent repairs to anicut and feeder channel to Choota Cheru, Rajaram, Miryalguda Taluq .. ..	13,800	13,227	do
3	Emergent repairs to feeder channel to Akkabai Cheru, Ghanpur .. ..	15,000	14,249	do
4	Restoring Oora Cheru and feeder channel, Poliam .. ..	C.S. 11,649	10,685	do

Seri- al No.	Name of work	Amount of estimate	Expendi- ture to end of 1851 F.	Remarks
<i>Warangal Division.—contd.</i>		Rs.	Rs.	
5	Emergent repairs to Pedda Cheru, Yacharam .. ..	80,102	28,592	Completed
6	Emergent repairs to the Chaipur large tank .. ..	20,535	21,069	do
7	Emergent repairs to feeder channel of the Mylasamudram tank, Kangal ..	18,080	5,596	In progress
8	Repairs to the Ramasamudram tank, Neela Cheru, Madaram .. ..	66,700	24,554	do
9	Constructing Bandam across the Palair stream and S.R. to channel and connected tanks, Mamidial ..	24,000	3,671	do
10	Restoring Pedda Cheru, Kotameerti ..	10,370	1,375	do
11	Restoring Rajacheru and feeder channel, Yelmaguda .. ..	15,750	15,740	Completed
12	Restoring Devarpalli large tank ..	18,904	18,786	do
13	Restoring large tank and feeder channel, Waligonda .. ..	17,304	17,208	do
<i>Asifabad Division.</i>				
14	Restoring Thori Cheru, Gangaram, Chennur Taluq .. ..	C.S. 1,11,000	96,655	do
15	Special repairs to anicut across the Jharlapet stream and large tank, Peddampet ..	13,330	13,329	do
16	Restoring Rayappa Cheru, Yamanpalli ..	C.S. 19,604	8,788	In progress
<i>Kareemnagar Division.</i>				
17	Improvements to the distributary system, Sanigaram .. ..	41,700	10,686	do
18	Restoring Chinna Cheru, Muktaraspet, Sultanabad Taluq .. ..	13,280	13,280	Completed
19	Restoring the Madlapoor tank, Maidapalli, Sultanabad Taluq .. ..	C.S. 10,868	9,919	do
20	Restoring Kolla Cheru, Mootsala, Sultanabad Taluq .. ..	12,880	2,161	In progress
21	Restoring Parry Cheru, Putnoor, Sultanabad Taluq .. ..	13,800	13,705	Completed
22	Restoring the Ramasamudram tank, Raigulagudam, Mahadevpur Taluq ..	10,515	7,060	In progress
23	Chegoan Project .. ..	1,09,000	1,506	do
24	Restoring the Mandiram large tank, Mahadevpur Taluq .. ..	25,870	8,028	do
25	Restoring Pedda Cheru, Shastrulapalli, Mahadevpur Taluq .. ..	25,500	27,738	Completed

Serial No.	Name of work	Amount of estimate	Expenditure to end of 1851 F.	Remarks
<i>Karcemnagar Division.—contd.</i>		Rs.	Rs.	
26	Restoring Booth Cheru, Surampet, Jactial Taluq .. ..	21,100	21,072	Completed
27	Restoring Boli Cheru, Kamalapur, Jactial Taluq .. ..	17,000	9,496	In progress
28	Restoring Akkapalli Cheru, Dharmapuri, Jactial Taluq .. ..	20,360	1,374	do
29	Restoring Chintal Cheru, Manal, Jaktial Taluq .. ..	11,590	11,347	Completed
30	Restoring large tank, Thatpalli, Jactial taluq .. ..	C.S. 30,493	25,527	do
31	Restoring Pedda Mysamma and Devuni cheru, Chandragiri, Sircilla Taluq ..	30,100	22,912	In progress
32	Restoring Royan Cheru, Oblapur, Sircilla Taluq .. ..	17,600	8,955	do
33	Feeder channel to Royan Cheru, Oblapur	21,480	15,336	do
34	Restoring Banappa Cheru, Veljipur, Sircilla Taluq .. ..	18,540	18,490	Completed
35	Restoring large tank, Kamalapur, Huzurabad Taluq .. ..	12,608	12,249	do
36	Restoring large tank, Veenavanka, Huzurabad Taluq .. ..	15,000	14,824	do
<i>Medak Division.</i>				
37	Restoring Chintal Cheru, Dharmajipet, Siddipet Taluq .. ..	11,100	973	In progress
38	Emergent repairs to large tank, Kalwal, Makthal Taluq .. ..	14,990	14,988	Completed
<i>Gulbarga Division.</i>				
39	S.R. to large tank, Yadgir, Yadgir Taluq	10,155	10,067	do
40	Restoring Abdulla tank, Rampur, Yadgir Taluq .. ..	11,500	11,471	do
<i>Raichur Division.</i>				
41	S.R. to Beechal channel and anicut ..	16,890	..	





